

**System and method for searching, finding and contacting dates on the Internet in instant messaging networks and/or in other methods that enable immediate finding and creating immediate contact.**

**Request for making small corrections and clarifications.**

I am hereby submitting a request for a few small corrections and clarifications in the enclosed patent request. The changes are all marked with underline. (The claims in the submitted patent have been changed in order to fit the limitations of claims in the USA, so changes in the claims are not included here).

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**1. I would like to make the following underlined corrections/clarifications in the 1<sup>st</sup> paragraph of the Definitions and clarification section:**

Through out the patent whenever variations or various solutions are mentioned, it is also possible to use various combinations of these variations or of elements in them, and when combinations are used, it is also possible to use at least some elements in them separately or in other combinations. These variations can be in different embodiments, or different version of the software, or sometimes different options available to choose from. In other words: certain features of the invention, which are described in the context of separate embodiments, may also be provided in combination in a single embodiment. Conversely, various features of the invention, which are described in the context of a single embodiment, may also be provided separately or in any suitable sub-combination.

**2. I would like to make the following underlined correction/clarification in the definition of "User" within the Definitions and clarification section:**

"User" or "users" as used throughout the patent, including the claims, can interchangeably be either user or users, and can refer to both sexes even when words such as "he" or "she" or "his" or "her" are used.

**3. I would like to make the following underlined corrections/clarifications in the shown part of the reference to Fig. 1a:**

**Fig. 1a** shows a preferable structure of the client-server system in the IM network, with the part that implements the dating. The instant messaging client (2) runs within the user's computer (1), and, if it's not a custom-made client, is preferably coupled to a plug-in or plug-ins or add-on or add-ons (3) for adding the special features of the present invention, otherwise the parts that implement these features in the client are part of the client itself. The user's computer (1) is connected through connection (4) to the Internet (5), where our server(s) (6) (with dynamic or static database(s) or both (7)) reside. The database (no matter if dynamic or static) is of course preferably run

by the server, and all date searches are preferably carried out there, although there can be for example a separation between the server (or servers) that handles the IM activity, and another server (or servers) that run the actual dating database and perform the searches and compatibility matches, etc., and return the results to the requesting client programs.

Preferably the system also has at least one or more of the following improvements over existing Instant Messaging systems:

1. The contactee list is preferably run by the client program (2) in the customary shape of a table, but preferably indicates also near each contactee additional data such as for example the last date & time he/she was online (in the instant messaging network) and/or the most common range of hours and/or week days he/she is most likely to be found online (In another variation this can be a more crude time range, such as for example, morning, noon, afternoon, early evening, late evening, and night), and/or for example the last time he/she performed a search for potential dates in the system (preferably the client program automatically gets these updates from the server when the user is Online), and/or geographical area (or for example some relative distance estimate compared to the user), and/or the compatibility scores, and/or how often they are usually online (such as for example how many hours on average per week or per day). This is very important since many times, and especially if the user has not used the system for some time, it is very hard to tell which of your contactees are still available and when it is likely to encounter them. Preferably near each contactee is listed also the last time contact was made with him/her and/or for example the length of his/her history list. Preferably, the table of contactees contains also a visible status indication about each person – for example if he/she is still looking for romance or other types of connection, etc. Preferably these additional data fields are visible by default near each contactee without having to click on anything in order to see them. An example of a way the contactee list can look like is shown in Fig. 8.
2. Preferably the user can choose if to sort the contactee list according to alphabetic order, compatibility score (at least for those contactees that were added through the date-searching), or any of the other data mentioned in clause 1 above or additional data, or any combinations of these.
3. Preferably the user has the ability to know how many people have him/her in their contactee lists. This is very easy to accomplish since either the user's client program or the server or both can for example increase a counter or decrease it whenever someone adds or deletes the user. Another possible variation is that the client program or the server or both can also keep a list of all the people that added the user to their contactee lists, so that the user can for example send messages that can be automatically distributed to all of them, and/or request to view the list of people that have him/her on their lists

(preferably at least their names and e-mails and/or IM ids). So preferably the server and/or the client program keep for each user also a "reverse" contactee-list, which lists all the other users who added him/her to their list and haven't deleted him/her yet. Another possible variation is that the server keeps only a copy of each contactee list and when needed the server runs over these lists and searches them, preferably with the aid of an index. (Of course, if the act of adding someone to the list of contactees is reciprocal, then the client program can know automatically that you were also added to their list, but this is not necessarily so, especially in cases that the person has not limited adding him to the list to requesting explicit authorization. Also, even if the adding to the contactee list could in some systems be automatically reciprocal, there is no reason why the deletion should be like this: if person A deletes person B from his list, it does not necessarily mean that person B wants to delete person A from his list, so the deletion process would make it non-trivial to know on which or on how many contactee lists you are actually listed).

4. Preferably, if someone changes his/her status for example from "available for dating" to non-available, etc., this is automatically broadcast (for example by the client program of that user or by the server) to all the people who have him/her on their contactee list, so that his/her status is updated on their lists (This can be done for example by an automatic message directly from that user's client program that updates the client programs of these people when they are Online and if they are Offline waits for them till they are Online again, or for example done similarly through the server). This updating is of course preferably in addition to making the person not appear in further date searches by others if the change in status implied this (until the status allows this again) – for example if he/she is in a relationship, etc.
5. Preferably when the matching potential dates are found, they are listed by descending reciprocal compatibility score. However, since there can be a large variance between the way people mark the acceptable ranges in the "Wanted" in each question and the way they mark the importances of questions, the score of how much someone fits the user's expectations can depend very much on the general bias of the user, in other words his/her tendency to be more or less "generous" in general in his/her scores. Therefore, in order to create a certain minimum normalization, preferably for sorting by reciprocal score, the score of how much the potential date fits the user's expectations is preferably given stronger weight (and thus effects more the reciprocal score, which is a weighted average) than how much the user fits the potential date's expectations. Another possible variation is to create some normalization of this by taking into account for example the average 1-way score that the user gives compatible dates and his standard deviation, and thus either use normalized scores, or use the normalization to create only a partial correction of the absolute scores. This is more preferable than full normalization because the fact that someone gives generally higher scores to everyone can also mean that he/she is really more open and more fit for many people than someone who

gives lower scores in general. This can have the effect of automatically also reducing the number of times such a person appears on other users' lists, in order to improve the balance. Another possible variation is for example to automatically limit at least temporarily the number of times the user can appear on other users' lists if his/her number of appearances in other lists has gone beyond a certain excess limit defined by the program (preferably in terms of percentages, since the absolute numbers change as the database grows). In addition to this, preferably if a user's compatibility scores are generally low beyond a certain criterion, preferably the system can report to the user (for example automatically or upon the user's request after displaying this option) the list of questions that most contributed to the problem (for example the 10 questions that most lower his scores with other people, or all the questions that contributed more than a certain factor to lowering the scores). This can be done for example by letting the matching program that runs on the server keep statistics for each user while running him/her against the potential dates, so that the statistics track the questions that are most problematic. Another possible variation is to run this statistical check only upon request and/or only on a subset sample of potential dates in order not to slow down the normal matching process when running the search on all potential dates. Another possible variation is for example to give the user also the option of choosing sorting by 1-way compatibility scores, and in that case preferably the user will get someone only if the opposite 1-way compatibility score is above a certain minimum, preferably a minimum set by the system and not by the user. (In other words you can request a sorting by how much the mate fits your expectations, but you will only be allowed to get mates whose expectations you also fit to a certain minimum). Preferably in this case the search results list shows also the reverse compatibility for each date. Of course these options can be used also in normal computer-dating systems. As mentioned above, preferably the user has also the option to request just a search by a list of traits, which is in other words a 1-way compatibility but typically on a small number of traits and without necessarily checking the opposite 1-way score, but in this case preferably the system can for example create various limitations such as for example that persons who don't fill the questionnaire completely (or at least a minimal subset of required questions) cannot participate at all in searches by others, etc., or for example not giving the person's phone, etc., in order to reduce the chance for harassment if the search ignores the reverse compatibility. So if the questionnaire has for example about 150 questions, the users can have a very systematic and serious compatibility search, but also experiment with instant searches especially when first trying out the system, by filling just the Wanted and the Importance in the few questions that most interest him/her, and thus start getting results already from the first minutes. So for example within minutes after entering the system for the first time, the user can search for example for all the blondes with high IQ and a big bust that are either currently online or not. Allowing such huge flexibility is very important because each persons can want very different things so a very large number of questions to choose from is preferably given to the user, even though the user

might choose for example just 3-10 questions to start with, but these are the few questions most important to him/her. (When choosing this option after the user has already filled the full questionnaire, preferably these requested traits are used instead of his preferences as marked for the full questionnaire, and his self data from the questionnaire can preferably either be taken into consideration or not, or taken into consideration at least partially, depending on the type of search or other considerations). Another possible variation is to allow any two users of the system to check the exact compatibility between them, for example by entering their two unique Id numbers and thus get normal compatibility scores or for example an even more detailed analysis. Of course, various combinations of the above variations are also possible.

6. Preferably, if the user requested a search also on people who are not currently Online, those that are Online appear in the list of results with a preferably easily visible mark, such as for example a different color indication and/or text size and/or shape and/or special icon, or for example two or more separate lists are generated (or one list divided into two or more parts), one with people currently online and one or more with people not currently online. Within each list or part of the list preferably the results are still ordered by descending compatibility score. Preferably near each person in the list of people not currently online there is also additional data such as when they were last online and/or how often they are usually online (such as for example how many hours on average per week or per day). Another possible variation is that the list of people who are not currently online can be further divided for example into smaller parts, so that for example people who were online in the last week appear in a section before people who haven't been online for example for more than a month, etc. Within each section preferably the sorting is again based on descending, preferably reciprocal, compatibility score. Preferably the size of each section can be determined automatically for example both by the compatibility score and by the recency. Another possible variation is that there are no separate sections according to recency, but the compatibility score itself and/or the sorting takes into account to a certain degree also the recency, for example according to a weight assigned for the recency factor, determined either by the user or by the system or both. Of course various combinations of these and other options are also possible. Of course many of the options mentioned here and in other clauses can also be used in normal computer-dating systems. An example of the way the results can look like is shown in Fig. 9.
7. Preferably the client program can receive automatic updates from the server, so that for example if questions (or options within questions) were added or deleted or changed in the compatibility questionnaire, it will be updated when the user is online with the client program. This is important, since unlike normal dating services on the Internet, where the questionnaire is typically on the server, in this case, for efficiency the questionnaire can be in the client itself, which also enables filling or correcting the questionnaire also when you

are offline. Another possible variation is that the client program retrieves again a new updated copy of the questionnaire when the user goes online. Preferably the client program can also be itself updated automatically when needed, for example by sending automatically new modules to all the users in the IM network. This feature if it had existed in advance could for example be used to add the dating option to all the ICQ users in the world almost instantly (or for example to add additional features to it later), without waiting for them to go and download a new version of the client program. This is very important, since even if users are informed about a great set of new features, it typically takes a long time till they go and actually download it, and the lag in updating causes incompatibilities between users who have already downloaded the new version and users that didn't. It is also much more efficient in terms of bandwidth. (However, for reasons of security, when this automatic update occurs, preferably the user is informed about it by the system and asked for confirmation).

8. Preferably, If the user is accessing the system from a client program on a different computer then preferably after giving an Id and password, the client program can get his/her questionnaire data and a copy of his/her contactee list from the server, so he/she can still work normally in the instant messaging network. However, this means that a copy of each user's contactee list is preferably kept also on the server.
9. Many of these concepts can also be similarly implemented also in cellular phone networks, and especially in networks where the phones are constantly connected and there is high bandwidth, such as for example in the 3G (3<sup>rd</sup> Generation) cellular networks. In such networks, in addition to the normal ability to send the person an e-mail or an instant message, preferably the user can also generate for example an SMS message, or generate a phone-call right from the instant-messaging client. However, (both with cellular and non-cellular phones) in case some people don't like to give their phone in the questionnaire for example for fear of harassment, preferably the system applies an optional "phone proxy" or "phone escrew service", which means that the user has an option to mark his/her phone as protected, and when someone gets his/her phone on the list, that someone can call the user for example through a special visible code but the code does not contain the real number and the call has to go through the proxy. The call itself can be done for example by direct activation though the client program (if it is done for example from a cellular phone connected to the Internet, or from a computer with a microphone and sound card), or for example through phoning a special number and then clicking the code, and the server there automatically routes the call to the real number. This way various protections can be implemented, such as for example allowing only a few first calls through the code and if the caller does not get from the user his/her real phone number by then, he/she can no longer use the code, thus automatically preventing harassments. The code can also be for example uniquely generated for each person who conducted the search, so

that the code cannot be used by someone else. Also, since the code can preferably be changed very easily, the user can preferably also request to change it immediately if harassed by someone, so that someone can't use it anymore even if the use limit hasn't been reached yet. Preferably this can also be used for example to enforce normal calling times and/or preferred calling times specified by the user, so the system preferably uses the information about country from the questionnaire and/or the time data from the system on each user's computer or cellular phone, and using an updated table of time zones, preferably when someone is calling through the code, the system makes sure that the call will not be for example in the night hours of the person being called. Another possible variation is that even without a code, simply clicking for example on a phoning option near the displayed date can immediately connect the user to that person without disclosing at this stage the number itself. This has the further advantage that this clicking option is available only to the user, so there is no code that can be transferred to others. Of course, such a "Phone proxy" system can be used also in other Online computer dating services that want to allow the user to get a list of dates which can all be reached immediately by phone, so those that don't want to give the phone can use the "protected phone" option. Of course, various combinations of the above variations are also possible.

10. Another problem in such constantly connected cellular networks, and also for example in other constant Internet connections, such as through cable TV companies or through ADSL, a new definition is needed about what it means to be "online", otherwise everyone on those networks can be defined as being online all the time (especially if the Instant messaging client is configured to connect automatically when starting an Internet connection). Therefore, at least in such networks preferably the user is considered to be online for example only if he has initiated or responded to any action related to the Instant messaging client for example in the last hour (or any other reasonable time) and is considered to be off-line for example if he hasn't typed anything on the computer for a certain time, etc. This means of course that the static and/or dynamic database is updated also according to these activity rules and not only when a user activates or deactivates the client or the connection. Another possible variation is to use these or similar rules also in any type of connection, as explained also in the definition of "Online" in the definition section.
11. In cellular networks preferably the system contains also additional features, such as being able to get a special indication if someone is very near to the user, for example within a certain radius. This can be accomplished for example by using info from the cellular company's cells, and/or by using this info directly from the phones, for example when they become GPS enabled. This way the user can know for example that some compatible date is very close to him/her (for example by a special mark in his list of search results and/or in his contactee list). Another possible variation is for example that if the user sees someone that he/she likes and both have cellular phones and are

members of the system, then preferably a certain optical or wireless signal generated by the phones themselves can tell the user through the status if the person next to him/her is available, and preferably the two phones can exchange Id's or numbers automatically and/or the questionnaire data directly and thus the client program can immediately run a check (preferably through the server) to see how compatible the two persons are. Preferably this is done by a short range wireless technology, such as Bluetooth, since Bluetooth technology will probably be standard on most cellular phones within the next few years, but it can also be any other short range wireless technology that is used or will be used in the future, such as for example UWB, which can easily compete with Bluetooth. Another possible variation is that the client program on each or at least on one of the phones/cellular devices can run the matching between the user and the potential dates in the immediate area without the need to access the server for this, for example by running a local, preferably limited version of the matching program and preferably limiting the check to the one or more relevant persons around. Therefore, this feature can be used also independently of the IM network and/or of the online dating service, for example by simply letting cellular phones that are close to each other and are marked by their user with the status "available for dating" – exchange data and check automatically compatibility and alert the user anytime he/she is close to someone available for dating and compatible. A more limited implementation of this that does not even need a real matching program is for example to use this method just to let the user know that someone next to him/her is available for dating, or use it for example with a minimum amount of data, such as for example age, sex, education, etc. If the match is sufficient, then preferably for example the user or each of the matching persons gets at least a few minimal details about the other person's appearance (such as for example Appearance, Height, Body build, Hair length, Hair color, Hair shape, etc., and/or a picture, if available, or "approximate image" if available, as explained below in clause 16, if no real picture is available) in order to be able to try and match this with what he/she sees around, and the other person's phone number (or "proxy number", as explained above, and/or an option to click for example on a phone icon near the date's data and be connected immediately), and/or be able to enter for example immediate textual chat with the other person. This can be useful for example at a university, on a bus, on a train, in shopping malls, etc. Another possible variation is that the cellular phones (or for example palm or other relevant cellular or wireless devices, as explained in the definitions) are able to exchange various queries between them. For example each user can mark that out of the large number of questions to choose from there are for example 5 questions which he/she would like to know in advance: for example, apart from is the other person available for dating, what is his/her level of education, what is his/her main area of work or study, etc. Preferably the user can also send the query with additional specifications in order to increase the chance that the reply will come from the right person. For example in a bus or train or university cafeteria or library there can be dozens or even hundreds of people within range. So if for example it is a blonde girl that looks a certain



age, preferably the user can ask for example that only the devices of blonde girls that are available for dating and within a certain age limits reply. The query is then preferably transmitted by the bluetooth (or other short range communication) to all the devices in the vicinity that are in range, and each device checks if its user is marked available for dating, and then if he/she fits the definitions, before broadcasting the reply to the question described above (such as is the person available, what is his/her education, what is his/her field of study or work, etc.). Preferably there is a different answer if the person is not available than if he/she is not a member of the system, otherwise a lack of reply could mean ambiguously both of these possibilities. Another possible variation is that the phone (or a preferably small and non-conspicuous add-on coupled to the phone) enables the user to point his/her device directly at the direction of the person that caught his/her eye, which preferably transmits some Id code and/or the phone number of the user who points it, and preferably sensors on that device of the person that was pointed to can find out that someone pointed the device and reply to the query directly with its own Id and/or phone number, etc. This pointing device can be based for example on infrared or on a directional short range wireless antenna. (This can work also on other devices even without the cellular network, such as for example palm devices that are bluetooth enabled even if they are not connected to the cellular network, or special gadgets for dating). However this is less desirable, since most people will be embarrassed to buy a special device for that and/or embarrassed to be seen pointing the phone at someone. Another possible variation is to implement it on the level of cells or groups of cells, so that the cellular phones know that they are close to each other for example by getting the information from the cellular company's cells. Another possible variation is to run the matching normally, but when dates are found that according to the info from the cells and/or for example from the GPS and/or for example from the bluetooth indication (or other short range communication technology) are also very close to the user, these dates are preferably for example marked with a special conspicuous sign (for example in the search results list and/or in the contactee list) and/or moved to a special category on top of the list of date search results and/or in the contactee list, or their score for match on area is increased by a certain factor and simply incorporated in the total compatibility score. In this version, preferably dates that are close for example by bluetooth indication are given even a more emphasized mark or moved higher to the top than dates who are only close by info from the cells. Since for some users the level of compatibility is much more important as long as the date is still within a reasonable area, while for others the fact that someone is now very close to them might be more important, preferably the user can easily experiment with increasing and reducing the weight given to the immediate vicinity factor. Also, for example people looking for pen-pals will probably put much less weight on the area. Another possible variation is that the system allows the user also to request separate search results lists (and/or contactee lists) according to area or marking for closer people - also more generally, such as for example putting all the people from the same country or state or town in a

separate category. Another possible variation is that if the server or servers become for example too overloaded because of too many users using the system, preferably different servers are used for different areas and date searches are for example limited in the size of areas that can be requested. Of course, various combinations of the above variations are also possible.

12. Preferably if someone hasn't entered the system for a certain time period, such as for example a few months (and/or if someone else fills a for example a "freeze form" or some other form of report about that person, reporting that the person said that it is no longer relevant), the server can preferably generate an automatic message to him/her (for example through e-mail or instant message) to ask for example if he/she is still interested in compatible dates, and if the person confirms this, or if no reply comes back for example after a certain period or preferably after sending more reminders, the person is preferably automatically "frozen" (so that people no longer receive him/her in the searches) until there is another indication (for example if he/she enters the system, or performs a new search, or updates the data, etc.). Preferably, the freeze form contains also the reason (such as for example the person found someone through the service, found someone elsewhere, found someone through the service and got married, found someone not through the service and got married, etc.). Another possible variation is that the system ignores the "freeze form" (that was filled by someone else) if the user has been active very recently or is currently Online, and especially if he/she performed a date-related activity such as conducting a date-search recently. Another possible variation is that the system does not ignore the freeze form if the reason is more significant, such as for example the person got married according to the report. By using this feature the weight given to the recency data can be significantly reduced since this can significantly decrease the chance that the potential dates found will be no longer relevant, even if their data is older.

#### **4. I would like to make the following underlined correction/clarification in the reference to Fig. 3:**

Fig. 3 shows a preferable way in which the dynamic database of users that are currently Online works. As soon as the user opens the Internet connection and activates the instant messaging client (which is either our own client program or the client program of one of the common instant messaging networks with our custom-made plug-in or plug-ins or add-on or add-ons), preferably a message is sent to the dynamic database server(s) containing the user's filled compatibility questionnaire data (31). Then our client or the plug-in or add-on coupled to the client keeps sending at short intervals a short message to one of our servers containing the user's unique id so that the system can tell if the user is still logged-in (preferably these short messages are sent either to the Database server itself or to another server, which will in turn notify the database server if the messages stop coming) (32). (Of course, if it is a plug-in or add-on to an existing client program, it is also possible to get such info by letting our server query the normal server of the client, but that is less efficient and might be

for example blocked by the normal server of the client). When the user requests an instant dating search (For example with his profile in a 2-way compatibility search or as a 1-way search or search for a small group of qualities, for example – find all the blondes with highest IQ who are currently logged in, or find them for example only if the reciprocal compatibility score with them is above a certain percent; Other search options can be for to example find only dates with a minimum compatibility score requested by the user, but preferably the user cannot request a minimal score lower than a certain minimum required by the system as the minimal acceptable compatibility score), the client sends the appropriate request to the dynamic database (33). The dynamic database will make the search accordingly and send back the list of most compatible dates that are currently connected, preferably including various details about them according to the type of search. The user may also add any of them to his/her contactee list and can be notified immediately when they are Online again (34) in a similar way to the description of 44. When the short messages from the client cease reaching the appropriate server, indicating that the user is no longer connected, his data is removed from the dynamic database (35).

**5. If possible I would like to make the following underlined corrections/additions in clauses 11,15,16 & 18 of the reference to Fig. 1a, with the understanding that these specific additions will be given a later priority date:**

11. In cellular networks preferably the system contains also additional features, such as being able to get a special indication if someone is very near to the user, for example within a certain radius. This can be accomplished for example by using info from the cellular company's cells, and/or by using this info directly from the phones, for example when they become GPS enabled. This way the user can know for example that some compatible date is very close to him/her (for example by a special mark in his list of search results and/or in his contactee list). Another possible variation is for example that if the user sees someone that he/she likes and both have cellular phones and are members of the system, then preferably a certain optical or wireless signal generated by the phones themselves can tell the user through the status if the person next to him/her is available, and preferably the two phones can exchange Id's or numbers automatically and/or the questionnaire data directly and thus the client program can immediately run a check (preferably through the server) to see how compatible the two persons are. Preferably this is done by a short range wireless technology, such as Bluetooth, since Bluetooth technology will probably be standard on most cellular phones within the next few years, but it can also be any other short range wireless technology that is used or will be used in the future, such as for example UWB, which can easily compete with Bluetooth. Another possible variation is that the client program on each or at least on one of the phones/cellular devices can run the matching between the user and the potential dates in the immediate area without the need to access the server for this, for example by running a local, preferably limited version of the matching program and preferably limiting the check to the one

or more relevant persons around. Therefore, this feature can be used also independently of the IM network and/or of the online dating service, for example by simply letting cellular phones that are close to each other and are marked by their user with the status "available for dating" – exchange data and check automatically compatibility and alert the user anytime he/she is close to someone available for dating and compatible. A more limited implementation of this that does not even need a real matching program is for example to use this method just to let the user know that someone next to him/her is available for dating, or use it for example with a minimum amount of data, such as for example age, sex, education, etc. If the match is sufficient, then preferably for example the user or each of the matching persons gets at least a few minimal details about the other person's appearance (such as for example Appearance, Height, Body build, Hair length, Hair color, Hair shape, etc., and/or a picture, if available, or "approximate image" if available, as explained below in clause 16, if no real picture is available) in order to be able to try and match this with what he/she sees around, and the other person's phone number (or "proxy number", as explained above, and/or an option to click for example on a phone icon near the date's data and be connected immediately), and/or be able to enter for example immediate textual chat with the other person. This can be useful for example at a university, on a bus, on a train, in shopping malls, etc. Another possible variation is that the phone (or other mobile device) can use for example the GPS of its own position and the position of the potential date and use for example its own north-west or compass direction, in order to point to the user the direction and distance to the potential date that was found, or for example use also geographical information such as for example a street map (obtainable for example from the nearby cells), in order to let the user know more exactly the location of the potential date. Another possible variation is that the cellular phones (or for example palm or other relevant cellular or wireless devices, as explained in the definitions) are able to exchange various queries between them. For example each user can mark that out of the large number of questions to choose from there are for example 5 questions which he/she would like to know in advance: for example, apart from is the other person available for dating, what is his/her level of education, what is his/her main area of work or study, etc. Preferably the user can also send the query with additional specifications in order to increase the chance that the reply will come from the right person. For example in a bus or train or university cafeteria or library there can be dozens or even hundreds of people within range. So if for example it is a blonde girl that looks a certain age, preferably the user can ask for example that only the devices of blonde girls that are available for dating and within a certain age limits reply. The query is then preferably transmitted by the bluetooth (or other short range communication) to all the devices in the vicinity that are in range, and each device checks if its user is marked available for dating, and then if he/she fits the definitions, before broadcasting the reply to the question described above (such as is the person available, what is his/her education, what is his/her field of study or work, etc.). Preferably there is a different answer if the person is not available

than if he/she is not a member of the system, otherwise a lack of reply could mean ambiguously both of these possibilities. Another possible variation is that the phone (or a preferably small and non-conspicuous add-on coupled to the phone) enables the user to point his/her device directly at the direction of the person that caught his/her eye, which preferably transmits some Id code and/or the phone number of the user who points it, and preferably sensors on that device of the person that was pointed to can find out that someone pointed the device and reply to the query directly with its own Id and/or phone number, etc. This pointing device can be based for example on infrared or on a directional short range wireless antenna. (This can work also on other devices even without the cellular network, such as for example palm devices that are bluetooth enabled even if they are not connected to the cellular network, or special gadgets for dating). However this is less desirable, since most people will be embarrassed to buy a special device for that and/or embarrassed to be seen pointing the phone at someone. Another possible variation is to implement it on the level of cells or groups of cells, so that the cellular phones know that they are close to each other for example by getting the information from the cellular company's cells. Another possible variation is to run the matching normally, but when dates are found that according to the info from the cells and/or for example from the GPS and/or for example from the bluetooth indication (or other short range communication technology) are also very close to the user, these dates are preferably for example marked with a special conspicuous sign (for example in the search results list and/or in the contactee list) and/or moved to a special category on top of the list of date search results and/or in the contactee list, or their score for match on area is increased by a certain factor and simply incorporated in the total compatibility score. In this version, preferably dates that are close for example by bluetooth indication are given even a more emphasized mark or moved higher to the top than dates who are only close by info from the cells. Since for some users the level of compatibility is much more important as long as the date is still within a reasonable area, while for others the fact that someone is now very close to them might be more important, preferably the user can easily experiment with increasing and reducing the weight given to the immediate vicinity factor. Also, for example people looking for pen-pals will probably put much less weight on the area. Another possible variation is that the system allows the user also to request separate search results lists (and/or contactee lists) according to area or marking for closer people - also more generally, such as for example putting all the people from the same country or state or town in a separate category. Another possible variation is that if the server or servers become for example too overloaded because of too many users using the system, preferably different servers are used for different areas and date searches are for example limited in the size of areas that can be requested. Of course, various combinations of the above variations are also possible.

15. Preferably the user can also request from the system to notify him/her automatically whenever there is a new potential date that entered the system

and has a higher compatibility with him/her than a certain criterion (such as for example higher than the lowest compatibility score in his/her current contactee list, or higher than an absolute minimal score defined by the user), or fulfills a certain condition, for example, all blondes with big bust and high IQ. Another possible variation is that this is done for example automatically by default unless the user requests otherwise. This is better than the state of the art, where the user gets a list only at certain times (such as for example once a month or, when he/she himself initiates a search). This can be applied for example when the new person submits his/her data for the first time to the system or performs a compatibility search for the first time, and preferably the user can ask either to be notified for example whenever such a new person exists in the static database, (if there is a static database), or only when that user is also Online (Of course when submitting the questionnaire or performing the search the new person is by definition Online, but the user that wished to be notified might be for example offline at that time and when he/she comes back Online the new person might be offline already). This can be done for example by keeping pending search requests (preferably only one search-request or up to a few pending search requests permitted per person) and/or keeping the minimum criterion for that person on his/her record on the server (for example the lowest score on the list that he/she got so far and/or the lowest score on his contactee list so far), and for example when the new person sends his/her data for the first time or requests a search or changes the data (but for efficiency reason most preferably this is done only or mainly when the new user requests a search), a reciprocal search is performed on all the potential mates in the system, and while checking the new person's data against each relevant potential mate in the system, the server preferably also checks if a condition has been fulfilled that requires sending the appropriate notification or update to the person against which the new person's data is being checked. This may sound a bit inefficient but preferably it has only a relatively small effect on the search speed, since various optimizations can be performed anyway such as for example stopping the comparison with a given person immediately for example if the area doesn't fit or the age doesn't fit. Preferably the user can also choose for example if he/she wants to be notified by an e-mail and/or instant message and/or by automatically having the new persons be inserted into his/her list of contactees (This choice can be made for example in general, or depending on the case, so that for example the user requests that someone be added automatically into his/her contactee list only in cases of especially high matching). Preferably the new person also has the choice in advance if he/she wants to be inserted automatically into the contactee lists of relevant people or at least for example into the contactee lists of the persons on top of his/her list of date-search results. This saves a lot of time and increases the chance for instant connection, especially if the new person prefers for example that the other dates contact him/her (females for example tend more than males to prefer to wait for someone to contact them). When the user is a member through cellular phone and not currently Online, another possible variation is to notify the user also for example preferably by sending an automatic ring

signal to the phone and then displaying the message. Preferably by clicking on an icon or option near the user's data the user can then automatically enter for example chat mode with the person or initiate an automatic call to the person (without knowing the actual number at this stage). This can be used also for example whenever someone highly compatible enters within Bluetooth range from him/her or is close according to the information from the cells, or for example from the GPS, and then preferably the user is also given data that can help him/her locate the person for example by showing the appearance data that are available, and/or giving the user more precise location data, such as for example pointing him/her to the direction and distance of the potential date, and/or giving for example street information, as explained above in clause 11 (However, this is intended mainly for locating someone on the street, not for giving the exact address where he/she lives, so that the actual address from the potential date's questionnaire is preferably not given to the user even if available. Also, preferably users can request to block this feature so that potential dates that get their data will not be given pointers to their exact location). Of course, various combinations of the above variations are also possible.

16. Since practice shows that most people in computer dating services, including Online services, don't like to send their pictures but prefer to search dates that have pictures, preferably the system allows users to use a systematic data pool of pictures (which can be for example a taxonomy or hierarchy), preferably real photographs (for example hundreds of pictures of male faces, hundreds of pictures of female faces, and similar separate sets for body shapes) and to choose at least the face that is most similar to the way they look and preferably also the body shape that is most similar to the way they look, and preferably also mark similarly the kinds of appearances they would most like in their ideal date (for example by marking the pictures that they most like, preferably with the ability to indicate the level of liking on a scale). Preferably there are more faces to choose from than body shapes, since there is much more possible variation in faces. Another possible variation is to use preferably carefully drawn images, which makes it easier to control more systematically various variables (or for example some photos and some drawings, etc.). Another possible variation is to make the choices (for example both for self description and for description of the ideal date) more modular than just body and faces, thus allowing the users to create more combinations. This is also important because it is very difficult to properly cover appearance, which is wholistic, by a few analytic questions. Preferably when this additional info is available it is used for the scoring of compatibility in appearance in addition to the normal textual question about appearance. Preferably when there is no direct match between marked self image and marked preferences in these images, the system takes into account also the distance between the preferred and the actual image, based on the systematic classification of the images according to various variables. When a potential date's data is displayed, and when no real picture of the date is available, preferably this "approximate image" is

displayed instead. This has the additional advantage of saving bandwidth and saving space and load on the server, because for approximate images it is sufficient to transfer just some numerical codes. Preferably these pictures or images are small and are downloaded automatically as part of the client, so that viewing them does not overload the server. (Preferably they can also be automatically updated sometimes by the server when needed, like the other updates described in clause 7). For efficiency reasons, preferably when letting the user mark choices many images are displayed on the screen together, as long as they don't become too small to discern the important details. Another possible variation is that the user is preferably asked to make choices in a tree-like manner – for example choose first between a number of images and then refine the choices based on the previous choices. When the choice is made for self description preferably the user can choose only one answer on each step in the tree, and when the choices are made for the desired date preferably the user can mark multiple options at least in some of the stages. (Preferably at least the top of the decision making tree may contain textual descriptions and/or explanations instead or in addition to images). Another possible variation is that preferably the user first fills the textual questions about appearance and then the system displays the graphic choices already based on the textual information about the self description and about the desired date. This narrows down the choices that have to be made and the number of images that actually need to be displayed and thus increases the efficiency. This way even if thousands of images are available to choose from, the choices can still be made very quickly and very efficiently. Another possible variation is that this is used even with users that do send a photo, in addition to the photo, because of the above described advantages in comparison to just using photos. Of course, various combinations of the above variations are also possible. Another possible variation is to use these approximate images (and/or real photos when available) to create Virtual Reality environments where clients can “meet”.

18. Another possible variation is to use the data from the compatibility questionnaires filled by the users to create “group compatibility” – which means creating a group of compatible people. One of the possible ways to accomplish this is for example by running the following algorithm: 1. First one or more individual is chosen that fulfill some required criteria. 2. Assuming that for example one female was chosen, the computer now finds one or more males most compatible with her (preferably by reciprocal compatibility) and adds them to the group (This finding of most compatible dates can be done on the fly or by using for example the previously generated list of most compatible dates that each person has). 3. For each of the males last added to the group the computer now finds one or more of the females most compatible with them (on condition that they are not already in the group) and adds them also to the group. 4. The computer now finds one or more of the most compatible dates for each of the recently added females, then for the newly added males, and so on, until the required group size has been reached. When finding the most compatible date or dates for each newly added member, the



computer can either take each time the next most compatible date for that person, or take into consideration for example also how compatible the new candidate is with the other members of the opposite sex that are already in the group (for example on average). This is useful for example for creating meetings or parties or virtual meetings for groups of high group compatibility.